

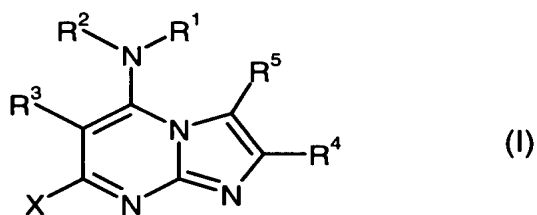
AMENDMENTS TO THE CLAIMS:

Please change the heading at page 37, line 1, from "Claims" to --WHAT IS CLAIMED IS:--

The following listing of claims will replace all prior versions of claims in the application.

Claims 1-10 (canceled)

-- Claim 11 (new): An imidazolopyrimidine of formula (I)



and salts thereof,

in which

R¹ represents H, optionally substituted alkyl, optionally substituted alkenyl, optionally substituted alkynyl, optionally substituted cycloalkyl, or optionally substituted heterocyclyl; or represents an organic radical that contains 3 to 13 carbon atoms and one or more silicon atoms and optionally 1 to 3 identical or different heteroatoms selected from the group consisting of oxygen, nitrogen, and sulphur and which that is unsubstituted or substituted by 1 to 4 identical or different halogens,

R² represents an organic radical that contains 3 to 13 carbon atoms and one or more silicon atoms and optionally 1 to 3 identical or different heteroatoms selected from the group consisting of oxygen, nitrogen, and sulphur and which that is unsubstituted or substituted by 1 to 4 identical or different halogens, or

R¹ and R² together with the nitrogen atom to which they are attached represent an optionally substituted heterocyclic ring that contains one or more silicon atoms and/or is substituted by one or more radicals R²,

R³ represents optionally substituted aryl, optionally substituted heterocyclyl, optionally substituted alkyl, optionally substituted alkenyl, optionally

substituted alkynyl, optionally substituted cycloalkyl, optionally substituted aralkyl, halogen, or optionally substituted amino, optionally substituted (C₁-C₈)-alkoxy, optionally substituted (C₁-C₈)-alkylthio, optionally substituted (C₆-C₁₀)-aryloxy, optionally substituted (C₆-C₁₀)-arylthio, optionally substituted heterocyclyloxy, optionally substituted (C₆-C₁₀)-aryl-(C₁-C₄)-alkoxy, optionally substituted (C₆-C₁₀)-aryl-(C₁-C₄)-alkylthio, optionally substituted heterocyclyl-(C₁-C₄)-alkoxy, or optionally substituted heterocyclyl-(C₁-C₄)-alkylthio,

- R⁴ represents H, halogen, optionally halogen-substituted alkyl, or optionally halogen-substituted cycloalkyl,
- R⁵ represents H, halogen, optionally halogen-substituted alkyl, or optionally halogen-substituted cycloalkyl, and
- X represents halogen, cyano, optionally substituted alkyl, optionally substituted alkoxy, or optionally substituted phenyl.

Claim 12 (new): An imidazolopyrimidine of formula (I) according to Claim 11 in which

- R¹ represents H; represents alkyl having 1 to 6 carbon atoms that is optionally mono- to pentasubstituted by identical or different substituents selected from the group consisting of halogen, cyano, hydroxy, alkoxy having 1 to 4 carbon atoms, and cycloalkyl having 3 to 8 carbon atoms; represents alkenyl having 2 to 6 carbon atoms that is optionally mono- to trisubstituted by identical or different substituents selected from the group consisting of halogen, cyano, hydroxy, alkoxy having 1 to 4 carbon atoms, and cycloalkyl having 3 to 8 carbon atoms; represents alkynyl having 3 to 6 carbon atoms that is optionally mono- to trisubstituted by identical or different substituents selected from the group consisting of halogen, cyano, alkoxy having 1 to 4 carbon atoms, and cycloalkyl having 3 to 8 carbon atoms; represents cycloalkyl having 3 to 8 carbon atoms that is optionally mono- to trisubstituted by identical or different substituents selected from the group consisting of halogen and alkyl having 1 to 4 carbon atoms; represents saturated or unsaturated heterocyclyl having 3 to 8 ring members and 1 to 3 heteroatoms selected from the group consisting of nitrogen, oxygen, and sulphur, where the heterocyclyl is optionally mono- or

- disubstituted by halogen, alkyl having 1 to 4 carbon atoms, cyano, and/or cycloalkyl having 3 to 8 carbon atoms; or represents an aliphatic saturated or unsaturated group having 1 to 13 carbon atoms and one or more silicon atoms that optionally contains 1 to 3 identical or different heteroatoms selected from the group consisting of oxygen, sulphur, and nitrogen and that is unsubstituted or substituted by 1 to 4 identical or different halogen atoms,
- R² represents an aliphatic saturated or unsaturated group having 1 to 13 carbon atoms and one or more silicon atoms that optionally contains 1 to 3 identical or different heteroatoms selected from the group consisting of oxygen, sulphur, and nitrogen and that is unsubstituted or substituted by 1 to 4 identical or different halogen atoms, or
- R¹ and R² together with the nitrogen atom to which they are attached represent a saturated or unsaturated heterocyclic ring having 3 to 8 ring members that contains one or more silicon atoms and/or is substituted by one or more radicals R², where the heterocycle optionally contains a further nitrogen, oxygen or sulphur atom as ring member and where the heterocycle is optionally substituted up to three times by fluorine, chlorine, bromine, alkyl having 1 to 4 carbon atoms, and/or haloalkyl having 1 to 4 carbon atoms and 1 to 9 fluorine and/or chlorine atoms;
- R³ represents C₁-C₁₀-alkyl, C₂-C₁₀-alkenyl, C₂-C₁₀-alkynyl, C₃-C₈-cycloalkyl, or phenyl-C₁-C₁₀-alkyl, where each such group is unsubstituted or partially or fully halogenated and/or optionally carries one to three radicals R^x; represents C₁-C₁₀-haloalkyl that optionally carries one to three radicals R^x; represents phenyl that is optionally mono- to tetrasubstituted by identical or different substituents selected from the group consisting of halogen, cyano, nitro, amino, hydroxy, formyl, carboxy, carbamoyl, and thiocarbamoyl; of straight-chain or branched alkyl, alkoxy, alkylthio, alkylsulphinyl, and alkylsulphonyl having in each case 1 to 6 carbon atoms, of straight-chain or branched alkenyl and alkenyloxy having in each case 2 to 6 carbon atoms, of straight-chain or branched haloalkyl, haloalkoxy, haloalkylthio, haloalkylsulphinyl, and haloalkylsulphonyl having in each case 1 to 6 carbon atoms and 1 to 13 identical or different halogen atoms, of straight-chain or branched haloalkenyl

and haloalkenylloxy having in each case 2 to 6 carbon atoms and 1 to 11 identical or different halogen atoms, of straight-chain or branched alkylamino, dialkylamino, alkylcarbonyl, alkylcarbonyloxy, alkoxycarbonyl, alkylsulphonyloxy, hydroximinoalkyl, and alkoximinoalkyl having in each case 1 to 6 carbon atoms in the individual alkyl moieties, of cycloalkyl having 3 to 8 carbon atoms, and of 1,3-propanediyl, 1,4-butanediyl, methylenedioxy (-O-CH₂-O-), and 1,2-ethylenedioxy (-O-CH₂-CH₂-O-), each of which is attached in the 2,3-position and is optionally mono- or polysubstituted by identical or different substituents selected from the group consisting of halogen, alkyl having 1 to 4 carbon atoms, and haloalkyl having 1 to 4 carbon atoms and 1 to 9 identical or different halogen atoms; represents saturated or unsaturated heterocyclyl having 3 to 8 ring members and 1 to 3 heteroatoms selected from the group consisting of nitrogen, oxygen, and sulphur, where the heterocyclyl is optionally mono- or disubstituted by halogen, alkyl having 1 to 4 carbon atoms, alkoxy having 1 to 4 carbon atoms, alkylthio having 1 to 4 carbon atoms, haloalkoxy having 1 to 4 carbon atoms, haloalkylthio having 1 to 4 carbon atoms, cyano, nitro, and/or cycloalkyl having 3 to 6 carbon atoms; or represents C₁-C₈-alkylamino, C₂-C₈-alkenylamino, C₂-C₈-alkynylamino, di-C₁-C₈-alkylamino, di-C₂-C₈-alkenylamino, di-C₂-C₈-alkynylamino, C₂-C₈-alkenyl-(C₂-C₈)-alkynylamino, C₂-C₆-alkynyl-(C₁-C₈)-alkylamino, C₂-C₈-alkenyl-(C₁-C₈)-alkylamino, C₆-C₁₀-arylamino, C₆-C₁₀-aryl-(C₁-C₈)-alkylamino, C₆-C₁₀-aryl-(C₁-C₄)-alkyl-(C₁-C₈)-alkylamino, heterocyclyl-(C₁-C₈)-alkylamino, or heterocyclyl-(C₁-C₄)-alkyl-(C₁-C₈)-alkylamino;

where R^x represents cyano, nitro, hydroxy, C₁-C₆-alkyl, C₁-C₆-haloalkyl, C₃-C₆-cycloalkyl, C₁-C₆-alkoxy, C₁-C₆-haloalkoxy, C₁-C₆-alkylthio, C₁-C₆-haloalkylthio, C₁-C₆-alkylsulphanyl, C₁-C₆-haloalkylsulphanyl, C₁-C₆-alkylsulphonyl, C₁-C₆-haloalkylsulphonyl, C₁-C₆-alkylamino, di-C₁-C₆-alkylamino, C₂-C₆-alkenyl, C₂-C₆-alkenyloxy, C₂-C₆-alkynyl, or C₃-C₆-alkynyloxy; or represents optionally halogenated oxy-C₁-C₄-alkyl-C₁-C₄-alkenoxy, oxy-C₁-C₄-alkenyl-C₁-C₄-alkoxy, or oxy-C₁-C₄-alkyl-C₁-C₄-alkyloxy,

- R⁴ represents H, halogen, (C₁-C₄)-alkyl that is unsubstituted or substituted by one or more halogen atoms, or cyclopropyl that is unsubstituted or substituted by one or more halogen atoms,
- R⁵ represents H, halogen, (C₁-C₄)-alkyl that is unsubstituted or substituted by one or more halogen atoms, or cyclopropyl that is unsubstituted or substituted by one or more halogen atoms, and
- X represents H, fluorine, chlorine, bromine, or CN.

Claim 13 (new) An imidazolopyrimidine of formula (I) according to Claim 11 in which

R¹ represents hydrogen, methyl, or ethyl;

R² represents a group Y²-Si(O_mCH₃)(O_nCH₃)(O_pY³),

where

m, n, and p independently of one another represent 0 or 1,

Y² represents a bond or alkanediyl, alkenediyl, or alkynediyl that are in each case straight-chain or branched, have 1 to 6 and 2 to 6 carbon atoms, are optionally interrupted by one or two non-adjacent oxygen atoms, and are unsubstituted or substituted by 1 to 3 identical or different halogen atoms, and

Y³ represents straight-chain or branched alkyl or alkenyl that have 1 to 5 and 2 to 5 carbon atoms, are optionally interrupted by an oxygen, nitrogen, or sulphur atom, and are unsubstituted or substituted by 1 to 3 identical or different halogen atoms;

R³ represents (C₁-C₈)-alkyl, (C₁-C₈)-cycloalkyl, or benzyl; represents phenyl that is optionally mono- to trisubstituted by identical or different substituents selected from the group consisting of fluorine, chlorine, bromine, cyano, nitro, formyl, methyl, ethyl, n- or i-propyl, n-, i-, s-, or t-butyl, allyl, propargyl, methoxy, ethoxy, n- or i-propoxy, methylthio, ethylthio, n- or i-propylthio, methylsulphinyl, ethylsulphinyl, methylsulphonyl, ethylsulphonyl, allyloxy, propargyloxy, trifluoromethyl, trifluoroethyl, difluoromethoxy, trifluoromethoxy, difluorochloromethoxy, trifluoroethoxy, difluoromethylthio, difluorochloromethylthio, trifluoromethylthio, trifluoromethylsulphinyl, trifluoromethyl-

sulphonyl, trichloroethynyloxy, trifluoroethynyloxy, chloroallyloxy, iodo-
 propargyloxy, methylamino, ethylamino, n- or i-propylamino, dimethylamino,
 diethylamino, acetyl, propionyl, acetyloxy, methoxycarbonyl, ethoxycarbonyl,
 hydroximinomethyl, hydroximinoethyl, methoximinomethyl, ethoximinomethyl,
 methoximinoethyl, ethoximinoethyl, cyclopropyl, cyclobutyl, cyclopentyl, and
 cyclohexyl, of 1,3-propanediyl, 1,4-butanediyl, methylenedioxy (-O-CH₂-O-),
 and 1,2-ethylenedioxy (-O-CH₂-CH₂-O-), each of which is attached in the 2,3-
 position and are optionally mono- or polysubstituted by identical or different
 substituents selected from the group consisting of fluorine, chlorine, methyl,
 ethyl, n-propyl, i-propyl, and trifluoromethyl; represents pyridyl that is attached
 in the 2- or 4-position and is optionally mono- to tetrasubstituted by identical
 or different substituents selected from the group consisting of fluorine,
 chlorine, bromine, cyano, nitro, methyl, ethyl, methoxy, methylthio, hydrox-
 iminomethyl, hydroximinoethyl, methoximinomethyl, methoximinoethyl, and
 trifluoromethyl; represents pyrimidyl that is attached in the 2- or 4-position and
 is optionally mono- to trisubstituted by identical or different substituents
 selected from the group consisting of fluorine, chlorine, bromine, cyano, nitro,
 methyl, ethyl, methoxy, methylthio, hydroximinomethyl, hydroximinoethyl,
 methoximinomethyl, methoximinoethyl, and trifluoromethyl; represents thienyl
 that is attached in the 2- or 3-position and is optionally mono- to trisubstituted
 by identical or different substituents selected from the group consisting of
 fluorine, chlorine, bromine, cyano, nitro, methyl, ethyl, methoxy, methylthio,
 hydroximinomethyl, hydroximinoethyl, methoximinomethyl, methoximinoethyl,
 and trifluoromethyl; represents C₁-C₈-alkylamino or di-C₁-C₈-alkylamino;
 represents thiazolyl that is attached in the 2-, 4-, or 5-position and is optionally
 mono- or disubstituted by identical or different substituents selected from the
 group consisting of fluorine, chlorine, bromine, cyano, nitro, methyl, ethyl,
 methoxy, methylthio, hydroximinomethyl, hydroximinoethyl, methoximino-
 methyl, methoximinoethyl, and trifluoromethyl; or represents N-piperidinyl,
 N-tetrazolyl, N-pyrazolyl, N-imidazolyl, N-1,2,4-triazolyl, N-pyrrolyl, or
 N-morpholinyl, each of which is unsubstituted or mono- or polysubstituted by
 identical or different substituents selected from the group consisting of
 fluorine, chlorine, bromine, cyano, nitro, methyl, ethyl, methoxy, methylthio,

hydroximinomethyl, hydroximinoethyl, methoximinomethyl, methoximinoethyl, and trifluoromethyl,

R⁴ represents H, Cl, F, CH₃, -CH(CH₃)₂, or cyclopropyl,

R⁵ represents H, Cl, F, CH₃, -CH(CH₃)₂, or cyclopropyl, and

X represents H, F, Cl, CN, or (C₁-C₄)-alkyl that is unsubstituted or substituted by one or more fluorine or chlorine atoms.

Claim 14 (new): An imidazolopyrimidine of formula (I) according to Claim 11 in which

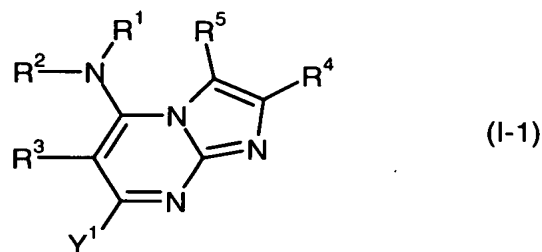
R¹ represents H;

R² represents SiMe₃, SiMe₂Et, SiMe₂CHMe₂, SiMe₂CH₂CHMe₂, SiMe₂CH₂CMe₃, SiMe₂OCHMe₂, SiMe₂OCH₂CHMe₂, CH₂SiMe₃, CH₂SiMe₂Et, CH₂SiMe₂CHMe₂, CH₂SiMe₂CH₂CHMe, CH₂SiMe₂OMe, CH₂SiMe₂OCHMe₂, CH₂SiMe₂OCH₂CHMe₂, CHMeSiMe₃, CHMeSiMe₂OMe, (CH₂)₂SiMe₃, (CH₂)₂SiMe₂Et, (CH₂)₂SiMe₂CHMe₂, (CH₂)₂SiMe₂CMe₃, (CH₂)₂SiMe₂CH₂CHMe₂, (CH₂)₂SiMe₂CH₂CH₂Me, (CH₂)₂SiMe₂CH₂CMe₃, (CH₂)₂SiMe₂OCHMe₂, (CH₂)₂SiMe₂OCH₂CHMe₂, CHMeCH₂SiMe₃, CHMeCH₂SiMe₂Et, CHMeCH₂SiMe₂CH₂CH₂Me, CHMeCH₂SiMe₂CHMe₂, CHMeCH₂SiMe₂CMe₃, CHMeCH₂SiMe₂CH₂CHMe₂, CFMeCH₂SiMe₃, CHMeCH₂CH₂SiMe₂OMe, CHMeCH₂SiMe₂OCHMe₂, CHMeCH₂SiMe₂OCH₂CHMe₂, CH₂CHMeSiMe₃, CH₂CHMeSiMe₂Et, CH₂CHMeSiMe₂CHMe₂, CHMeCHMeSiMe₃, CMe₂CH₂SiMe₃, (CH₂)₃SiMe₃, (CH₂)₃SiMe₂Et, (CH₂)₃SiMe₂CHMe₂, (CH₂)₃SiMe₂CH₂CHMe₂, (CH₂)₃SiMe₂OMe, (CH₂)₃SiMe₂OCHMe₂, (CH₂)₃SiMe₂OCH₂CHMe₂, CHMeCH₂CH₂SiMe₃, CHMeCH₂CH₂SiMe₂Et, CHMeCH₂CH₂SiMe₂CHMe₂, CHMeCH₂CH₂CH₂SiMe₂OMe, CHMeCH₂CH₂SiMe₂OCHMe₂, CMe=CHSiMe₃, CH₂CH₂SiMe₂OMe, -C≡C-SiMe₃, -CH₂-C≡C-SiMe₃, or -CHMe-C≡C-SiMe₃,

- R³** represents (C₁-C₆)-alkyl, (C₃-6)-alkenyl, (C₃-C₆)-alkynyl, or (C₃-C₈)-cycloalkyl, where each such group is unsubstituted or substituted by one or more fluorine or chlorine atoms; represents 2,4- or 2,6-disubstituted phenyl, 2-substituted phenyl, or 2,4,6-trisubstituted phenyl; represents pyridyl that is attached in the 2- or 4-position and that is optionally mono- to tetrasubstituted by identical or different substituents from the group consisting of fluorine, chlorine, bromine, cyano, methyl, ethyl, methoxy, methylthio, hydroximino-methyl, hydroximinoethyl, methoximinomethyl, methoximinoethyl, and trifluoromethyl; or represents pyrimidyl that is attached in the 4-position and is optionally mono- to trisubstituted by identical or different substituents selected from the group consisting of fluorine, chlorine, bromine, cyano, methyl, ethyl, methoxy, methylthio, hydroximinomethyl, hydroximinoethyl, methoximino-methyl, methoximinoethyl, and trifluoromethyl,
- R⁴** represents H, -CH₃, -CH(CH₃)₂, Cl, or cyclopropyl,
- R⁵** represents H, -CH₃, -CH(CH₃)₂, Cl or cyclopropyl, and
- X** represents fluorine, chlorine, (C₁-C₇)-alkyl, or (C₁-C₃)-haloalkyl.

Claim 15 (new): A process for preparing imidazolopyrimidines of the formula (I) according to Claim 11 comprising

- (a) for imidazolopyrimidines of formula (I-1)

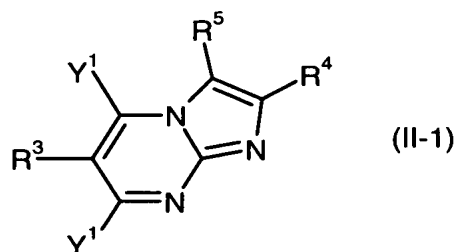


in which

R¹, R², R³, R⁴, and R⁵ are as defined for formula (I) of Claim 11, and

Y¹ represents halogen,

reacting a haloimidazolopyrimidine of formula (II-1)

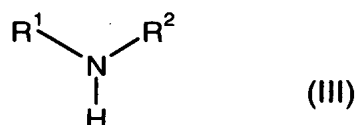


in which

R³, R⁴, and R⁵ are as defined for formula (I) of Claim 11, and

Y¹ represents halogen,

with an amine of formula (III)

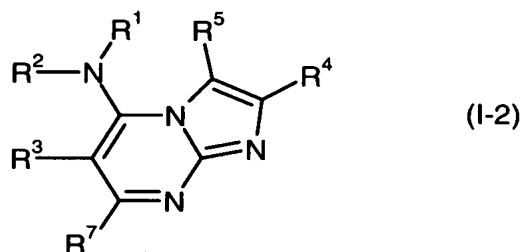


in which R¹ and R² are as defined for formula (I) of Claim 11,

optionally in the presence of a diluent, optionally in the presence of an acid acceptor, and optionally in the presence of a catalyst,

or

(b) for imidazolopyrimidines of formula (I-2)

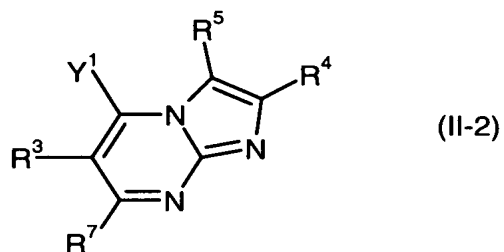


in which

R¹, R², R³, R⁴, and R⁵ are as defined for formula (I) of Claim 11, and

R⁷ represents optionally substituted alkyl or optionally substituted phenyl,

reacting a haloimidazolopyrimidine of formula (II-2)



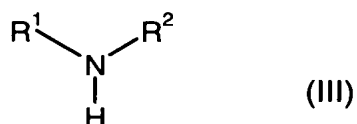
in which

R³, R⁴, and R⁵ are as defined for formula (I) of Claim 11,

Y¹ represents halogen, and

R⁷ represents optionally substituted alkyl or optionally substituted phenyl,

with an amine of formula (III)

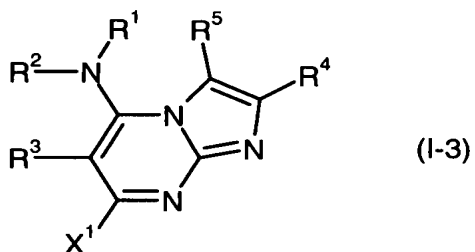


in which R¹ and R² are as defined for formula (I) of Claim 11,

optionally in the presence of a diluent, optionally in the presence of an acid acceptor, and optionally in the presence of a catalyst,

or

(c) for imidazolopyrimidines of formula (I-3)

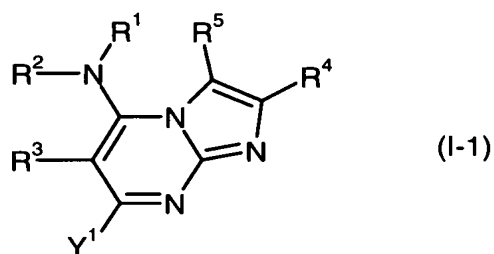


in which

R¹, R², R³, R⁴, and R⁵ are as defined for formula (I) of Claim 11, and

X¹ represents cyano or optionally substituted alkoxy,

reacting an imidazolopyrimidine of formula (I-1)



in which

R¹, R², R³, R⁴, and R⁵ are as defined for formula (I) of Claim 11, and

Y¹ represents halogen,

with a compound of formula (IX),



in which

M represents ammonium, tetraalkylammonium, an alkali metal cation, or an alkaline earth metal cation, and

X¹ represents cyano, alkoxy, or substituted alkoxy.

Claim 16 (new): A composition for controlling unwanted microorganisms comprises one or more imidazolopyrimidines of formula (I) according to Claim 11 and one or more extenders and/or surfactants.

Claim 17 (new): A composition according to Claim 16 additionally comprising one or more further agrochemically active compounds.

Claim 18 (new): A method for controlling unwanted microorganisms comprising applying an effective amount of an imidazolopyrimidine of formula (I) according to Claim 11 to the unwanted microorganisms and/or their habitats.

Claim 19 (new): A process for preparing a composition for controlling unwanted microorganisms comprising mixing one or more imidazolopyrimidines of formula (I) according to Claim 11 with one or more extenders and/or surfactants. --